

# Recombinant Human Apolipoprotein E2 (ApoE2)

## Recombinant Protein

### Product Information

**Product No.:** A215

**Storage:** -20°C

## Product Description

### Background:

Apolipoprotein E (ApoE) produced by the liver and circulating macrophages, that is a constituent of every plasma lipoprotein except the smallest low density lipoproteins (LDL). It is a key player in the recycling and redistribution of lipids and cholesterol. ApoE is a ligand with a high affinity for low density lipoprotein receptors (LDLR). It regulates the activity of enzymes that metabolize lipids and also makes lipids soluble. Mice and humans that lack ApoE cannot remove excess lipoproteins from the plasma and have an increased risk of atherosclerosis. Defective binding of ApoE to its receptors will lead to accumulation of cholesterol-rich lipoprotein particles in the plasma; this is the cause of type III hyperlipoproteinemia. There are three main isoforms of ApoE all product of alleles at a single gene locus: E2 (Cys112, Cys158), E3 (C112, Arg158), and E4 (Arg112, Arg158). Inheritance of ApoE2 has been associated with lower levels of total cholesterol, low-density lipoprotein cholesterol and non-high-density lipoprotein cholesterol. E2 is associated with the genetic disorder type III hyperlipoproteinemia and with both increased and decreased risk for atherosclerosis.

### Known Reactivity Species:

Human

### Expression Host:

E. coli Cells

### Formulation

This product is 0.2 micron sterile filtered and lyophilized from 20 mM Sodium Phosphate, pH 7.8 + 0.5mM DTT.

### Purity

>90% by SDS-PAGE and HPLC

### Endotoxin

<1.0 EU/μg as determined by the LAL method

### Storage and Stability

The lyophilized protein should be stored desiccated at -20°C. The reconstituted protein can be stored for at least one week at 2-8°C. For long-term storage of the reconstituted protein, aliquot into working volumes and store at -20°C in a manual defrost freezer.

**Avoid Repeated Freeze Thaw Cycles.**

### Country of Origin

USA